

**I CLAIM:**

1. A method for playing a casino game comprising the steps of:

receiving a wager,

playing an underlying game of chance,

5     •     playing a knowledge-based bonus game in combination with the underlying game, the combined knowledge-based bonus game with the underlying game of chance having a house advantage within a predetermined range.

2. The method of claim 1 wherein the underlying game of chance is a slot game.

3. The method of claim 1 wherein the step of playing the knowledge-based game occurs when play of the underlying game of chance stops.

4. The method of claim 3 further comprising the step of restarting the play of the underlying game of chance when the play of the knowledge-based bonus game is over.

5. The method of claim 3 wherein stopping the underlying game of chance is based upon a condition occurring in the play of the underlying game of chance.

6. The method of claim 3 wherein stopping the underlying game of chance is based upon a condition occurring unrelated to the play of the underlying game of chance.

7. The method of claim 3 wherein stopping of the underlying game of chance occurs at a given frequency.

8. The method of claim 3 wherein stopping of the underlying game of chance is randomly chosen at a given frequency.

9. The method of claim 1 wherein the house advantage is at least a set limit based upon all answers to all queries in the knowledge-based bonus game are always correct.

10. The method of claim 1 wherein the house advantage is at most a set limit based upon all answers to all queries in the knowledge-based bonus game are always guessed at.

11. The method of claim 1 wherein the predetermined house advantage is in the range of about -3% to about 20%.

12. The method of claim 1 wherein the step of playing the knowledge-based game further comprises the steps of:

(a) providing at least one query to the player in the knowledge-based game,

(b) receiving at least one answer from the player in response to the provided query,

(c) paying the player based upon the at least one answer.

13. The method of claim 12 wherein the at least one query is a multiple choice question having only one of the multiple choices correct.

14. The method of claim 12 wherein the at least one query is an query requiring a proximate answer.

15. The method of claim 12 wherein the at least one query is a multiple choice question having at least one of the multiple choices correct.

16. The method of claim 12 wherein the at least one query is a puzzle having a forced outcome.

17. The method claim of claim 12 wherein the at least one query is a true/false question.

18. The method of claim 12 wherein the step of paying the player further comprises the steps of:

paying the player a first amount when the player correctly answers the at least one query,

5 paying the player a second amount when the player incorrectly answers the at least one query.

19. A method for playing a combined knowledge-based bonus game with an underlying casino game of chance, the method comprising the steps of:

5 receiving a wager,  
playing the underlying casino game of chance,  
stopping play of the underlying casino game of chance,  
playing the knowledge-based bonus game when the underlying casino game of chance is stopped, the steps of playing the knowledge-based game at least having the steps of:

10 (a) providing at least one query to the player in the knowledge-based game,

(b) receiving at least one answer from the player in response to the provided at least one query,

15 (c) paying the player based upon the at least one answer by the player

20 providing a house advantage within a predetermined range for the combined knowledge-based bonus game and underlying casino game, the predetermined range having a set limit based at least upon all answers to all queries in the knowledge-based game are always correct and the wager.

20. The method of claim 19 wherein the at least one query is a multiple choice question having only one of the multiple choices is correct.

21. The method of claim 19 wherein the at least one query is an query requiring a proximate answer.

22. The method of claim 19 wherein the at least one query is a multiple choice question having a plurality of the multiple choices correct.

23. The method of claim 19 wherein the at least one query is a puzzle having a forced outcome.

24. The method of claim 19 wherein the step of paying the player further comprises the steps of:

paying the player a first amount when the player correctly answers the at least one query,

5 paying the player a second amount when the player incorrectly answers the at least one query.

25. A method for playing a combined knowledge-based bonus game with an underlying casino game of chance, the method comprising the steps of:



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26. The method of claim 25 wherein the underlying casino

27. The method of claim 25 wherein the step of playing the

28. The method of claim 25 wherein the step of playing the

29. The method of claim 25 wherein the step of playing

30. The method of claim 25 wherein the step of playing is

31. A method for playing a knowledge-based game having a

receiving a wager from a player to play the knowledge-based game,

5            providing at least one query to the player in the knowledge-based game in response to the received wager,

receiving at least one answer from the player in response to the provided query,

10           providing a house advantage with a predetermined range,  
paying the player based upon the received wager, the at least one answer from the player, and the house advantage.

32. The method of claim 31 wherein the house advantage is at least a set limit based upon all answers to all queries in the knowledge-based bonus game always being correct.

33. The method of claim 31 wherein the house advantage is at most a set limit based upon all answers to all queries in the knowledge-based bonus game always being guessed at.

34. The method of claim 31 wherein the predetermined house advantage is in the range of about -3% to about 20%.

35. The method of claim 31 wherein the step of playing the knowledge-based game further comprises the steps of:

- 5            (a) providing at least one query to the player in the knowledge-based game,  
             (b) receiving at least one answer from the player in response to the provided query.

36. The method of claim 35 wherein the at least one query is a multiple choice question having only one of the multiple choices is correct.

37. The method of claim 35 wherein the at least one query is an query requiring a proximate answer.

38. The method of claim 35 wherein the at least one query is a multiple choice question having a plurality of the multiple choices correct.

39. The method of claim 35 wherein the at least one query is a puzzle having a forced outcome.

40. The method of claim 35 wherein the at least one query is a true/false question.

41. The method of claim 35 wherein the step of paying the player based upon the received wager further comprises the steps of:  
paying the player a first amount when the player correctly answers the at least one query,

5 paying the player a second amount when the player incorrectly answers the at least one query.

42. A method for a casino game comprising the steps of:  
providing a first game of chance,  
providing a second knowledge-based game,  
playing the first game of chance having a negative player's  
5 expected return,

stopping play of the first game,  
playing the second knowledge-based game when the first game is stopped, the second knowledge-based game having a positive player's expected return.

43. The method of claim 42 further comprising the step of returning to the play of the first game when the play of the second knowledge-based game is over.

44. The method of claim 42 wherein the first game is a slot game.

45. The method of claim 42 wherein the step of stopping the first game is based upon a condition occurring in the play of the first game.

46. The method of claim 42 wherein the step of stopping the first game is based upon a condition occurring unrelated to the play of the first casino game.

47. The method of claim 42 wherein the step of stopping is randomly chosen at a given frequency.

48. The method of claim 42 wherein the positive player's expectation is at most a first set limit based upon all answers to all queries in the second knowledge-based game always being correct.

49. The method of claim 42 wherein the positive player's expectation is at least a second set limit based upon all answers to all queries in the second knowledge-based game always being guessed at.

50. The method of claim 42 wherein the step of playing the second knowledge-based game further comprises the steps of:

(a) providing at least one query in the second knowledge-based game,



- 5 (b) receiving at least one answer in response to the provided query,
- (c) paying based upon the at least one answer.

51. The method of claim 50 wherein the at least one query is a multiple choice question having only one of the multiple choices is correct.

52. The method of claim 50 wherein the at least one query is an query requiring a proximate answer.

53. The method of claim 50 wherein the at least one query is a multiple choice question having at least one of the multiple choices correct.

54. The method of claim 50 wherein the at least one query is a puzzle having a forced outcome.

55. The method of claim 50 wherein the step of paying the wager further comprises the steps of:

- paying a first amount when the correct answer is provided for the at least one query,
- 5 paying a second amount when the incorrect answer is provided for the at least one query.

56. The method of claim 42 wherein the step of playing the second knowledge-based game is played with a positive minimum player's expected return for a player who always guesses and a positive maximum player's expected return for a player who is always correct.

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57. The method of claim 42 wherein the step of playing provides only one query.

58. The method of claim 42 wherein the step of playing provides at least one query.

59. A method for a casino game, said casino game played by a player placing a wager, the method comprising the steps of:

providing a knowledge-based game, the knowledge-based game having a plurality of queries,

5        setting a house advantage in a house advantage range  
between a first value and a second value, said first value at least  
based on the wager and the player having all correct answers to all of  
the plurality of queries in the knowledge-based game so as to limit the  
player's winnings and said second value at least based on the wager  
10        and the player guessing answers to all of the plurality of queries in the  
knowledge-based game so as to limit the player's losses.

60. The method of claim 59 wherein the method further comprises the steps of:

providing a game of chance, said game of chance having a player's expected return

5        randomly activating the knowledge-based game at a given  
frequency as the player plays the game of chance,

in the step of setting the house advantage further basing the first and second values on said given frequency and the player's expected rate of return based on the wager for the game of chance.

61. The method of claim 60 further comprising the step of requiring the player to place a second wager to play the knowledge-based game in response to the random activation.

62. The method of claim 59 wherein the step of providing the knowledge-based game further comprises the step of displaying an query with multiple choice answers during play of the knowledge-based game from the plurality of queries.

63. The method of claim 62 further comprising the steps of:  
awarding the player a first payout when the player answers the displayed query correctly,

allowing the player to answer again when the play answers incorrectly in response to the aforesaid step,

awarding the player a second payout when the player answers correctly in response to the aforesaid step, the second payout less in value than the first payout,

in the step of setting the house advantage, further basing the first and second values on said first and second payouts.

64. The method of claim 62 further comprising the step of obtaining from a database said query with said multiple choice answers, said database having said plurality of queries with corresponding multiple choice answers.

65. The method of claim 64 wherein said query is randomly obtained from said database.

66. The method of claim 64 further comprising the step of permanently removing said obtained query with multiple choice answers from said database.

67. The method of claim 64 further comprising the step of randomly inserting said obtained query with multiple choice answers into said database for reuse.

5 68. The method of claim 64 further comprising the step of inserting said obtained query with multiple choice answers into said database so as not to be obtained again until all other stored queries are obtained.

69. The method of claim 62 further comprising the steps of:  
obtaining from a database said query with a correct answer, said database having said plurality of queries with corresponding correct answers,  
5 generating at least one incorrect answer from the correct answer so as to provide said multiple choice answers.

70. The method of claim 62 further comprising the steps of:  
generating a set of payouts declining in value for the multiple choice answers, each higher value payout corresponding to a multiple choice answer that is a more correct response to the query.

71. The method of claim 62 further comprising the step of:  
providing different categories of queries with multiple choice answers,  
delivering a lammer to the player for each category that the  
5 player correctly answers,  
when the player receives a lammer for each category, entering a bonus round.

72. The method of claim 71 wherein the bonus round is a large payout.

73. The method of claim 71 wherein the bonus round is a final query with a corresponding set of multiple choice answers and further comprising the step of awarding a bonus payout when the final query is answered correctly.

74. The method of claim 62 wherein the multiple choice answers are proximate.

75. The method of claim 59 wherein successive queries increase in difficulty provided each prior query is correctly answered.

76. The method of claim 74 wherein the payouts for correctly answering the successive queries increase.

77. The method of claim 59 wherein as successive queries are correctly answered by the player the payouts for each correctly answered query increases.

78. The method of claim 59 wherein when a player correctly answers an query, the player risks at least a portion of the payout obtained to correctly answer the next query in which event the player receives a higher payout if correct and loses the at least a portion of the payout if incorrect.

79. The method of claim 59 wherein the step of providing the knowledge-based game further comprises the step of displaying a puzzle to the player.

80. A method for a casino game, said casino game played by a player placing a wager, the method comprising the steps of:

providing a knowledge-based game, the knowledge-based game having a plurality of queries,

awarding the player based on answers to the queries,

setting a house advantage for the casino game based on the wager and the player having all correct answers.

81. The method of claim 80 wherein each query has a plurality of answers.

82. The method of claim 81 wherein the plurality of answers to each query contains more than two correct answers.

83. The method of claim 82 wherein in the step of awarding the player is awarded for each correct answer.

84. The method of claim 82 wherein in the step of awarding the player is awarded only for all correct answers.

85. The method of claim 82 of ending the knowledge-based bonus game when the player selects an incorrect answer.

86. A method for a casino game, said casino game played by a player placing a wager, the method comprising the steps of:

providing a knowledge-based game, the knowledge-based game having a plurality of queries,

5                   awarding the player based on answers to the queries,

                  setting a house advantage for the casino game based on the wager and the player guessing answers.

87. A method for a casino game, said casino game played by a player placing a wager, the method comprising the steps of:

providing a knowledge-based game,

5                   awarding the player based on the player's responses during play of the knowledge-based game,

                  setting a house advantage for the casino game based on the wager and the player's responses.